

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010235**Date Inspected:** 18-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed UT of approximately 10% of the repaired area previously tested and accepted by ZPMC Quality Control personnel. Punch List Item 1680 (Inspection request # 0044668) deck diaphragm to floor beam flange located in 1AW.

1. SSD34-PP8.5-004/003

2AW+2BW

SMAW repair welding on weld joint 003 located at OBW2A side plate of segment. (Counter weight)

Welder is identified as Mr. Li Wenguo (066261). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and CWR repair procedure #867.

Y Locations of excavations by above noted welder (066261) are located at approximately 400, 1830, 2870, 3740, 5000 and 6640mm.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

2AE

SMAW repair welding on weld joint 004 located at CA100 edge to deck plate bike path side of segment. Welder is identified as Mr. Hu Yacheng (049379). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR repair procedure #899.

Y Locations of excavations by above noted welder (049379) are located at approximately 18240~ 18400 and 24450~25635mm.

SMAW repair welding on weld joint 004 located at CA100 edge to deck plate bike path side of segment. Welder is identified as Mr. Zhao Guanglin (044779). ZPMC QC is identified as Xu Yumin. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR repair procedure #899.

Y Locations of excavations by above noted welder (044779) are located at approximately 15370, 16060, and 24075~24135mm.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

2AW+2BW

1. Side plate weld joint OBW2A-003 excavation areas located at y locations 400, 1830, 2870, 3740, 5000 and 6640mm. This QA Inspector noted all noted areas were accepted by ZPMC.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

UT reject excavation was performed at deck plate to edge plate weld joint on segment 2BW cross beam side of segment. Y locations and transverse, slag and porosity indications (observed by visual) are as followed at time of observation:

1. Y location 95mm (1 transverse), 140mm (2 transverse indications), 310mm~515mm (3 transverse and porosity indications), 1260mm (slag indication), 1300mm (slag indication), 1540mm (slag indication), 1744mm (porosity), 2630mm, 3630mm (1 transverse indication) and 4700mm.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
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Reviewed By:	Miller,Mark	QA Reviewer
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